

REMARKS

In response to the Office Action mailed May 4, 2007, Applicant respectfully requests reconsideration. To further the prosecution of this application, amendments have been made in the claims, and each of the rejections set forth in the Office Action has been carefully considered and is addressed below. The claims as presented are believed to be in condition for allowance.

Claims 1-35 were previously pending in this application. Claims 1-4, 7, 13-16, 19, 25-27 and 30 are amended herein. Claims 36-41 have been added. No claims have been cancelled. As a result, claims 1-41 are pending for examination, with claims 1, 4, 13, 16, 25 and 27 being independent. No new matter has been added.

Telephone Interview with Examiner

Applicant's representatives thank Examiner Swearingen for the courtesies extended in granting and conducting a telephone interview on September 17, 2007. The substance of the interview is summarized herein.

Claim Objections

A. Claim Objections under 37 C.F.R. §1.75(c)

The Office Action objects to claims 8, 20 and 31 under 37 C.F.R. §1.75(c) for purportedly being of improper dependent form for failing to further limit the subject matter of a previous claim. Specifically, the Office Action contends that these claims merely repeat the last step in the claims from which they respectively depend. Applicant respectfully traverses this objection.

Claims 8, 20 and 31 depend from claims 4, 16 and 27, respectively. Claims 4, 16 and 27 each recite, *inter alia*, determining that first and second remote applications are emulated on a same client and may belong to a same context by examining first and second information. By contrast, claims 8, 20 and 31 more specifically determine that the first and second remote applications are emulated on the same client and may belong to the same context when the first information matches

the second information. As claims 4, 16 and 27 require only examining the first and second information, and not determining that the first and second information match, claims 8, 20 and 31 further limit the subject matter of claims 4, 16 and 27, respectively. Accordingly, Applicant respectfully requests withdrawal of the objection to claims 8, 20 and 31 under 37 C.F.R. §1.75(c).

B. Claim Objections for Purported Informalities

The Office Action objects to several of the claims for including terms which are purportedly unclear. For example, the Office Action contends that the phrase “that at least one remote application” recited by claims 1, 13 and 25 should be replaced with “the at least one remote application,” that the phrase “the same context” recited by claims 1, 2, 13 and 14 should be replaced with “the context,” that the term “aspect” recited by claims 1, 13 and 25 should be replaced with “an aspect,” that the phrase “the remote application” recited by claims 1, 2, 3, 14, 15 and 26 should be replaced with “the at least one remote application,” that the phrase “the client” recited by claims 4 and 16 should be replaced with “a client,” that the phrase “a same client” recited by claims 7, 19 and 30 should be changed to “the same client,” and that the phrases “the same client” and “the same context” recited by claim 27 should be changed to “a same client” and “a same context,” respectively.

The affected claims have been so amended. Accordingly, Applicant respectfully requests withdrawal of the objections to these claims for purported informalities.

Claim Rejections under 35 U.S.C. §101

Claims 1-35 are rejected under 35 U.S.C. §101 for purportedly being directed to non-statutory subject matter. Specifically, the Office Action contends that for a claim to be statutory under §101, it must produce a “useful, concrete and tangible output, such as displaying or storing,” and that the limitation directed to “determining” recited by each of these claims fails to produce such an output.

During the telephone interview, the undersigned pointed out that the rejection is based on a

misapplication of §101 and the MPEP section that set forth how claim rejections thereunder are to be analyzed. The Examiner suggested that rather than debating the point, perhaps agreement could be reached on amending the claims to add an act based upon the determination recited by the claims, as that would address his concern.

Thus, each of independent claims 1, 4, 13, 16, 25 and 27 is amended herein so as to produce a useful, concrete and tangible result, and to thus be statutory under §101. Specifically, claims 1, 13 and 25 are amended to include a limitation directed to allowing at least one remote application and at least one client application to belong to the same context if it is determined that the at least one remote application is emulated on a first client. Claims 4, 16 and 27 are amended to include a limitation directed to allowing first and second remote applications to belong to a same context if it is determined that the first and second remote applications are emulated on a same client.

In view of the foregoing, Applicant respectfully requests withdrawal of the rejection of claims 1-35 under 35 U.S.C. §101 for purportedly being directed to non-statutory subject matter.

Claim Rejections under 35 U.S.C. §102

Claims 1, 4-8, 13, 16-20, 25 and 27-31 are rejected under 35 U.S.C. §102(b) as purportedly being anticipated by U.S. Patent No. 6,085,247 to Parsons, *et al.* ("Parsons"). Applicant respectfully traverses this rejection, as each of independent claims 1, 4, 13, 16, 25 and 27 patentably distinguish over Parsons.

A. Brief Overview of Embodiments of the Invention

During the interview, Applicant's representatives provided an overview of embodiments of the invention, which relate generally to performing context management. By way of background, it was explained that in some settings, certain entities, or "subjects," may be shared by multiple software applications (see Applicant's specification at, e.g., p. 1, lines 9-10). As an example, users in the healthcare field commonly provide input relating to a particular patient to multiple applications (p.1, lines 10-12). Input may include clinical information (e.g., x-ray images or blood work results),

financial information (e.g., insurance coverage or billing history), or other data (p.1, lines 12-14).

Data which describes a given subject (in this example, a patient), and which is used commonly by multiple applications, is referred to in Applicant's specification as a "context" defined by the subject (p. 1, lines 22-23). Although patient data is an illustrative example, other data may define a subject as well, including data relating to a clinical encounter, provider, observation, insurer, user (e.g., to enable "single sign-on" capabilities for the multiple applications) and/or other data (p.1, lines 15-19). In addition, shared subjects may be used in other fields besides healthcare (p. 1, lines 15-21).

Historically, the user was forced to repeat the entry of data relating to one or more subjects to each application (p. 1, lines 14-15). However, the desirability of managing a context defined by one or more subjects across multiple applications has been recognized, and standards for context management have been defined (p.1, lines 23-26). For example, the Health Level 7 (HL 7) context management specification, published in 1999 by the Clinical Context Object Work Group (CCOW), defines an overall architecture and detailed processes for managing context across a range of healthcare-related applications (p., lines 26-30).

Certain aspects of the present invention relate to performing context management in a networked computing environment (p. 12, lines 7-10). For example, one embodiment of the invention relates specifically to emulated applications, wherein an application executes on a remote application server and is emulated (e.g., via the Citrix MetaFrame and ICA architecture) on a client device (p. 13, lines 8-10). In this respect, Applicant has recognized that when the applications that may share a context include a remote application and a desktop application, it can be desirable to verify that the remote application and the desktop application are associated with the same client (i.e., that the remote application is emulated on the client on which the desktop application executes), to prevent a "rogue" application executing remotely from the desktop from intruding into the context (p. 25, lines 15-20). Accordingly, one embodiment of the invention provides a method for verifying that a remote application is emulated on the same client on which at least one desktop application executes, so that it may share a context with the desktop application(s) (p. 25, lines 20-22). In one implementation, first information (e.g., a first identifier) is received from the client, second information (e.g., a second identifier) is received from the remote application server that identifies the client on which the remote

application is emulated, and the information (e.g., the first and second identifiers) is compared to determine whether the remote application is emulated on the client on which the desktop application(s) execute(s) (p. 25, lines 22-25).

Another embodiment may be employed in system configurations in which a client emulates multiple remote applications executing on different remote application servers, to verify that remote applications executing on different remote application servers are emulated on the same client and can share a context (p. 29, lines 9-12). In one exemplary implementation, first information (e.g., a first identifier) is received from a first remote application server which identifies the client on which a first remote application is emulated, second information (e.g., a second identifier) is received from a second remote application server which identifies the client on which a second remote application is emulated, and the information is examined to determine whether the first and second remote applications are emulated on the same client and may share a context (p. 29, lines 13-16).

The foregoing overview is provided to assist the Examiner in appreciating some aspects of the invention. However, the description above may not apply to each independent claim, and the language of each independent claim may differ in material respects from the summary provided above. Thus, Applicants respectfully request that careful consideration be given to the language of each independent claim, and that each be addressed on its own merits, without relying on the summary provided above. In this respect, Applicants do not rely on the summary provided above to distinguish any of the claims over the prior art.

B. Brief Overview Of Parsons

Parsons discloses a server operating system which enables the user of a client device to begin an emulation session, and later dynamically reconnect to the session using a different client device (Abstract). By way of background, Parsons asserts that one problem with the Citrix WinFrame product is that each emulation session is bound to a particular client device, such that a user may not connect to the same session from two different client devices (col. 2, lines 26-29). For example, if a user logs on to a remote application server from a work PC having certain system settings, decides to temporarily stop an emulation session and disconnect from the server, and then later tries to log on from a home

laptop having different settings, the user will be prevented from reconnecting to the existing session and forced to create a new session for the laptop (col. 2, lines 30-42).

Accordingly, Parsons provides a server operating system that enables users to reconnect to existing sessions from different client devices (col. 2, lines 56-58). When a user connects to the server via a first client, a session manager creates a first session including various software modules to support a windowing environment, as well as various hardware drivers conforming to the configuration of the first client (col. 2, line 63; col. 3, line 7). When the user disconnects from the server, the server maintains the session so that the user may return to it later (col. 3, lines 8-11). When the user later reconnects using a second client having different settings than the first client, the session manager recognizes (via the user's logon) that the user is affiliated with the first session, and adapts the first session to conform to the configuration of the second client (col. 3, lines 14-27). Specifically, the first session is modified with a new set of parameters (e.g. new hardware drivers) to support the configuration of the second client (col. 3, lines 27-32).

C. Claims 1-3

Claim 1 recites a method for use in a system comprising a first client, a context management (CM) server, a remote application server and at least one network that couples together the first client, the CM server and the remote application server. The remote application server executes at least one remote application, the first client executes at least one client application that may share a context with the at least one remote application, and the first client further executes an emulation application that emulates the at least one remote application on the first client. The CM server executes a context management service to manage the context. The method, for verifying that the at least one remote application is emulated on the first client and may belong to the context, comprises acts of: (a) receiving from the first client first information that uniquely identifies an aspect of the first client; (b) receiving from the remote application server second information that uniquely identifies an aspect of a remote client on which the at least one remote application is emulated; (c) determining that the at least one remote application is emulated on the first client and may belong to the context when the first information matches the second information; and (d) if it is determined in

the act (c) that the at least one remote application is emulated on the first client, allowing the at least one remote application and the at least one client application to belong to the context.

As discussed during the telephone interview, Parsons fails to satisfy several of the limitations recited by claim 1. For example, Parsons fails to disclose or suggest a context management (CM) server which executes a context management service to manage a context. The Office Action cites a passage of Parsons (i.e., at col. 7, lines 34-38) as purportedly satisfying this limitation. This passage discloses that the server operating system enables a dynamic reassociation of users to windowing sessions, even if the users log on from different client machines having different characteristics (col. 7, lines 34-38). This passage simply does not relate to a CM server which executes a context management service. In this respect, Applicant's specification states that "context management" refers to the sharing of any of numerous types of subject data by a plurality of applications (see, e.g., p.12, lines 19-21; p.1, lines 22-23). Parsons does not disclose or suggest anything relating to the sharing of subject data by a plurality of applications.

In addition, Parsons fails to disclose or suggest a CM server and a remote application server which are coupled by at least one network. In this respect, the Office Action cites two separate passages of Parsons that describe the capabilities of the same server (i.e., server 22, Fig. 1) as purportedly satisfying this limitation. Specifically, the Office Action contends that the operating system 60 of server 22 (Fig. 2), disclosed at col. 7, lines 34-37, meets the limitation of a CM server, and that the multi-client server core disclosed at col. 6, lines 11-20 meets the limitation of a remote application server. However, Parsons discloses that the multi-client core is part of server operating system 60 (col. 6, lines 2-3). Thus, Parsons fails to disclose or suggest a CM server and a remote application server which are coupled by at least one network, as required by claim 1.

Parsons also fails to disclose or suggest receiving, from a first client, information that uniquely identifies an aspect of the first client. The Office Action contends that this limitation is satisfied by Parsons' disclosure of the receipt of a user logon. However, Parsons is directed to enabling a user to reconnect to a particular session from any of multiple client devices. The user logon identifies the user, not the client, and is employed precisely so that the server operating system can determine that the same user is employing two different client devices to connect to a

windowing session. Thus, the user logon does not constitute an aspect of any particular client, as the same logon is used on any client that the user employs. Thus, Parson fails to disclose or suggest receiving, from a first client, information that uniquely identifies an aspect of the first client, as required by claim 1.

In view of the foregoing, claim 1 patentably distinguishes over Parsons, such that the rejection of claim 1 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

D. Claims 4-12

Claim 4 recites a method for use in a system comprising at least one client, a context management (CM) server, a plurality of remote application servers and at least one network that couples together the at least one client, the CM server and the plurality of remote application servers. The plurality of remote application servers comprises first and second remote application servers respectively executing first and second remote applications that are emulated on the at least one client and may share a context. The at least one client executes at least one emulation application that emulates the first and second remote applications on the at least one client, and the CM server executes a context management service to manage the context. The method, for verifying that the first and second remote applications are emulated on a same client and may belong to a same context, comprises acts of: (a) receiving from the first remote application server first information that uniquely identifies an aspect of a client on which the first remote application is emulated; (b) receiving from the second remote application server second information that uniquely identifies an aspect of a client on which the second remote application is emulated; (c) determining that the first and second remote applications are emulated on the same client and may belong to the same context by examining the first information and the second information; and (d) if it is determined in the act (c) that the first and second remote applications are emulated on the same client, allowing the first and second remote applications to belong to the same context.

Claim 4 recites several limitations which are similar to those recited by claim 1. For example, claim 4 recites a CM server which executes a context management service to manage a

context, a CM server and a plurality of remote application servers coupled together by at least one network, and receiving information that uniquely identifies an aspect of a client on which a first remote application is emulated. The Office Action cites the same passages of Parsons discussed above in relation to claim 1 as purportedly satisfying these limitations. For the reasons discussed above with reference to claim 1, Parsons fails to satisfy these limitations. Accordingly, claim 4 patentably distinguishes over Parsons, such that the rejection of claim 4 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

Claims 5-12 depend from claim 4 and are allowable for at least the same reasons.

E. Claims 13-15

Claim 13 recites at least one computer-readable medium encoded with instructions for performing a method which is substantially similar to the method of claim 1. For at least the reasons discussed above with reference to claim 1, claim 13 patentably distinguishes over Parsons, such that the rejection of claim 13 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

Claims 14-15 depend from claim 13 and are allowable for at least the same reasons.

F. Claims 16-24

Claim 16 recites at least one computer-readable medium encoded with instructions for performing a method which is substantially similar to the method of claim 4. For at least the reasons discussed above with reference to claim 4, claim 16 patentably distinguishes over Parsons, such that the rejection of claim 16 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

Claims 17-24 depend from claim 16 and are allowable for at least the same reasons.

G. Claims 25-26

Claim 25 recites a context management server for use in a system comprising a first client, the context management server, a remote application server and at least one network that couples together the first client, the context management server and the remote application server. The context management server comprises at least one processor to execute a context management service to manage a context. The context management server also comprises at least one controller that, *inter alia*, receives from a first client first information that uniquely identifies an aspect of the first client.

It should be appreciated from the discussion above relating to claim 1 that Parsons fails to disclose or suggest a context management server comprising at least one controller which receives, from a first client, information that uniquely identifies an aspect of the first client. Accordingly, claim 25 patentably distinguishes over Parsons, such that the rejection of claim 25 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

H. Claims 27-35

Claim 27 recites a context management server for use in a system comprising at least one client, the context management server, a plurality of remote application servers and at least one network that couples together the at least one client, the context management server and the plurality of remote application servers. The context management server comprises at least one processor to execute a context management service to manage a context. The context management server further comprises at least one controller that, *inter alia*, receives from a first remote application server first information that uniquely identifies an aspect of at least one client on which a first remote application is emulated.

It should be appreciated from the discussion above relating to claim 4 that Parsons fails to disclose or suggest a context management server comprising at least one controller that receives from a first remote application server first information that uniquely identifies an aspect of at least one client on which a first remote application is emulated. Accordingly, claim 27 patentably

distinguishes over Parsons, such that the rejection of claim 27 under 35 U.S.C. §102(b) as purportedly being anticipated by Parsons should be withdrawn.

Claims 28-35 depend from claim 27 and are allowable for at least the same reasons.

New Claims

New claims 36-41 are added to further define Applicant's contribution to the art.

New claims 36, 38 and 40 depend from claims 1, 13 and 25, respectively, and include limitations directed to, if it is determined that at least one remote application is not emulated on a first client, preventing the at least one remote application and at least one client application from belonging to a context. New claims 36, 38 and 40 are allowable for at least the same reasons as those discussed above with reference to claims 1, 13 and 25.

New claims 37, 39 and 41 depend from claims 4, 16 and 27, respectively, and include limitations directed to, if it is determined that first and second remote applications are not emulated on a same client, preventing the first and second remote applications from belonging to a same context. New claims 37, 39 and 41 are allowable for at least the same reasons as those discussed above with reference to claims 4, 16 and 27.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: 10/4/07

Respectfully submitted,

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